HD-TVI
EyeBall Camera

Version 06.15

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KEY FEATURES

- 1080p HD-TVI
- Main Output: HD-TVI
- 2nd Outptut: Analog
- 2.8-12mm Vari-focal Lens
- Auto-focus Lens
- OSD Setup
- Day-Night w/IR
- D-WDR / 3DNR
- UTC
- DC12V
- Outdoor / Ivory Housing

CAUTION : Any changes or modifications in construction of this device which are not expressly approved by the party

NOTE : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates,uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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screw

❶ Power Input and Video Connectors

- TVI (Yellow)
- CVBS (White)
- DC12V

❷ Base
❸ Camera
❹ Middle Ring
❺ Base Ring
❻ Lens
❼ IR LED
❽ OSD Joystick

UP
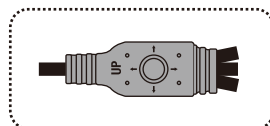
REMINDER
For longer, more consistent performance, avoid installation locations prone to direct sunlight.

Before installing the camera, please make sure that all of the following itmes are included in the box.

EYEBALL CAMERA
1. Dome Camera
2. Installation Manual
3. Mounting Accessories

Screws   hexagon mood   L-Wrench
          wrench bolt
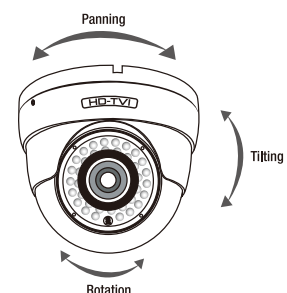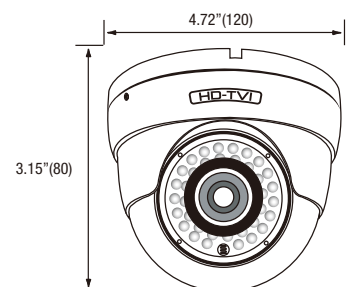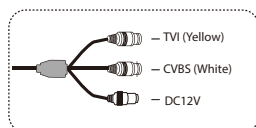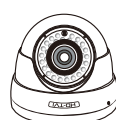
Mounting Accessories   Eyeball Camera

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For the specific camera dimensions, please refer to the diagram below.

Unit: Inch (mm)
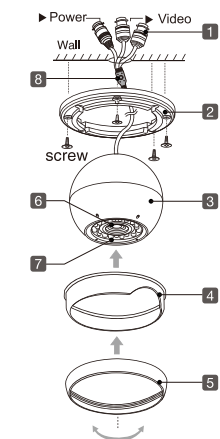

4.72"(120)

3.15"(80)

Panning

Tilting

Rotation

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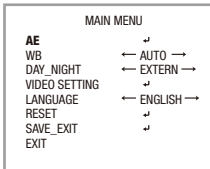| Imaging Sensor	1/3" CMOS
Total Pixels	1952(H) x 1266(V) = 2,471,232 (pixel)
Active pixels	1944(H) x 1213(V) = 2,358,072 (pixel)
Scanning system	Progressive Scan
Resolution	TVI : 1920x1080p(1080p/30fps) , 1280x720p(720p/60fps), Analog : 700TVL
Min. illumination	Color : 1.0 lux , BW : 0.5lux / Color DSS : 0.002 lux , BW DSS : 0.001 lux
S/N Ratio	More than 52dB (AGC off)
Video Output	TVI : 1920x1080p(1080p/30fps) , 1280x720p(720p/60fps)
	Analog : 1Vp-p Composite Output NTSC, PAL(w/o WDR)
LENS	DC(ALC)/Manual(ELC)
BRIGHTNESS	0~20
SHUTTER	AUTO / FLICKER / MANUAL(1/30(25)~1/6000)
SENS-UP	OFF/x2/x3/x4/x5/x6/x7/x8
AGC	0~20
DEFOG	ON/OFF
BACKLIGHT	OFF/HLC/BLC/WDR
DAY&NIGHT	AUTO/COLOR/B&W/EXT.
WHITE BAL.	AUTO/AUTOext/PRESET/MANUAL
DNR	OFF/LOW/MIDDLE/HIGH
SHARPNESS	0~10
MIRROR	ON/OFF
FLIP	ON/OFF
D-WDR	ON/OFF
SHADING	ON/OFF
PRIVACY	ON(16 Points)/OFF
MOTION	ON/OFF
OUTPUT MODE	720P / 720P CROP / 1080P
FRAME RATE	1080P-25FPS / 30FPS, 720P CROP-50FPS / 60FPS
CVBS	NTSC/PAL
LANGUAGE	ENG/CHN/JPN (MULTI LANGUAGE)
COM	ID (0 ~ 255), BAUDRATE (2400 / 4800 / 9600 / 57600/115200), PROTOCOL
	(PELCO-P / PELCO-D)
Operating Temperature	-10℃ ~ +50℃ (Humidity : 0%RH ~ 80%RH)
Storage Temperature	-20℃ ~ +60℃ (Humidity : 0%RH ~ 90%RH)
Lens	2.8-12mm Auto-Focus Lens
Input Voltage	DC 12V
IR LEDs	36
IR LEDs Distance	100ft

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You may select the OSD menu items to adjust by using OSD buttons for your desire.
To use OSD menu, press SET button and SET UP will appear as shown on the screen.
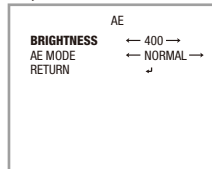
```
        MAIN MENU
AE                   ↵
WB            ← AUTO →
DAY_NIGHT     ← EXTERN →
VIDEO SETTING        ↵
LANGUAGE      ← ENGLISH →
RESET                ↵
SAVE_EXIT            ↵
EXIT
```
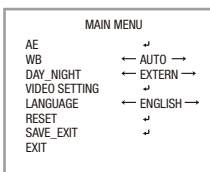
Move the arrow to select functions by use
UP/Down & LEFT/RIGHT buttons.

AE

```
        MAIN MENU
AE                   ↵
WB            ← AUTO →
DAY_NIGHT     ← EXTERN →
VIDEO SETTING        ↵
LANGUAGE      ← ENGLISH →
RESET                ↵
SAVE_EXIT            ↵
EXIT
```

AE ; BRIGHTNESS

```
              AE
BRIGHTNESS    ← 400 →
AE MODE       ← NORMAL →
RETURN              ↵
```
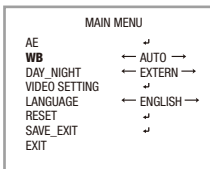
1) BRIGHTNESS   - 400 -
    -> 256 ~ 1024
2) AE MODE   - NORMAL -
   -> BACK LIGHT / FRONT LIGHT / NORMAL
3) RETURN

WB

```
        MAIN MENU
AE                   ↵
WB            ← AUTO →
DAY_NIGHT     ← EXTERN →
VIDEO SETTING        ↵
LANGUAGE      ← ENGLISH →
RESET                ↵
SAVE_EXIT            ↵
EXIT
```
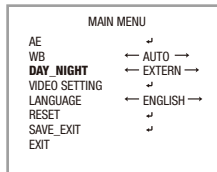
1) WB   - AUTO -
   -> AUTO / GRAY WORLD

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DAY/NIGHT

```
        MAIN MENU
AE                   ↵
WB            ← AUTO →
DAY_NIGHT     ← EXTERN →
VIDEO SETTING        ↵
LANGUAGE      ← ENGLISH →
RESET                ↵
SAVE_EXIT            ↵
EXIT
```

1) DAY / NIGHT   - EXTURN -
-> COLOR / MONO / INTERNAL / EXTURN

VIDEO SETTING

```
        MAIN MENU
AE                   ↵
WB            ← AUTO →
DAY_NIGHT     ← EXTERN →
VIDEO SETTING        ↵
LANGUAGE      ← ENGLISH →
RESET                ↵
SAVE_EXIT            ↵
EXIT
```

VIDEO SETTING ; VIDEO STANDARD

```
        VIDEO SETTING
VIDEO STANDARD  ← NTSC →
NR                   ↓
SHARPNESS            ↓
SATURATION      ← 104 →
RETURN               ↵
```
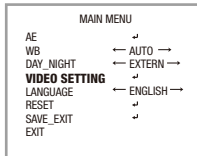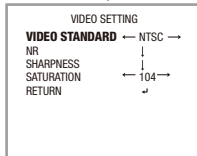
1) VIDEO STANDARD   - NTSC -
   -> NTSC / PAL

VIDEO SETTING ; NR

```
              NR
VIDEO STANDARD  ← NTSC →
NR                   ↓
2D-RN           OPEN
Y-NR            OPEN
C-NR                 ↓
SHARPNESS       104
SATURATION           ↵
RETURN
```
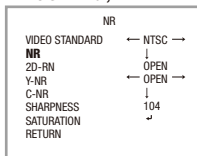
1) 2D- NR - OPEN -
    -> OPEN / CLOSE
2) Y - NR   -OPEN -
    -> OPEN / CLOSE
3) C- NR   -OPEN-
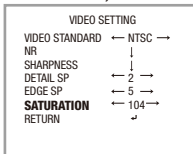   -> OPEN / CLOSE

VIDEO SETTING ; SHARPNESS

```
        VIDEO SETTING
VIDEO STANDARD  ← NTSC →
NR                   ↓
SHARPNESS            ↓
DETAIL SP       ← 2 →
EDGE SP         ← 5 →
SATURATION      ← 104 →
RETURN               ↵
```
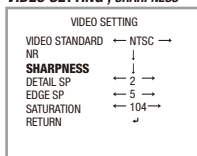
1) DETAIL SP   - 2 -
    -> 0 ~ 15
2) DETAIL SP   - 5 -
    -> 0 ~ 15

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VIDEO SETTING ; SATURATION

```
        VIDEO SETTING
VIDEO STANDARD  ← NTSC →
NR                   ↓
SHARPNESS            ↓
DETAIL SP       ← 2 →
EDGE SP         ← 5 →
SATURATION      ← 104 →
RETURN               ↵
```

1) SATURATION   - 104 -
    -> 0 ~ 504

LANGUAGE

```
        MAIN MENU
AE                   ↵
WB            ← AUTO →
DAY_NIGHT     ← EXTERN →
VIDEO SETTING        ↵
LANGUAGE      ← ENGLISH →
RESET                ↵
SAVE_EXIT            ↵
EXIT
```
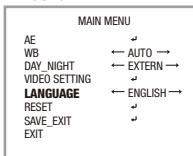
1) LANGUAGE
-> ENGLISH / CHINESES

RESET

SAVE_EXIT

EXIT